|  | Application No.   | Applicant(s)   |
|--|---|--|
|  | 10/625,135  | ROBINSON ET AL.  |
| Notice of Allowability ☐   | Examiner  | Art Unit   |
|  | Lars A Olson  | 3617   |
| The MAILING DATE of this communication appe  | ars on the cover sheet wi   | th the correspondence address-   |
| All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED ir<br>or other appropriate commu<br>GHTS. This application is s | n this application. If not included unication will be mailed in due course. THIS |
| 1. This communication is responsive to the after-final amendment received from the applicant on September 20, 2004.  |   |  |
| 2. $\boxtimes$ The allowed claim(s) is/are <u>9-15</u> .   |   |  |
| 3. $\boxtimes$ The drawings filed on <u>7/23/2003</u> are accepted by the Exam   | iner.   |  |
| <ol> <li>Acknowledgment is made of a claim for foreign priority un</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ol>   | der 35 U.S.C. § 119(a)-(d)  | or (f).  |
| 1. Certified copies of the priority documents have   | been received.  |  |
| 2.  Certified copies of the priority documents have  | been received in Application  | on No  |
| <ol><li>Copies of the certified copies of the priority doc</li></ol>   | cuments have been received  | d in this national stage application from the                                    |
| International Bureau (PCT Rule 17.2(a)).   |   |  |
| * Certified copies not received:   |   |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   | a reply complying with the requirements  |
| <ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submi<br/>INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>  |   |  |
| 6. CORRECTED DRAWINGS ( as "replacement sheets") mus   | t be submitted.   |  |
| (a) ☐ including changes required by the Notice of Draftspers   | on's Patent Drawing Reviev  | v ( PTO-948) attached  |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date   |   |  |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date   | Amendment / Comment or  | r in the Office action of  |
| Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the  |   |  |
| <ol> <li>DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F</li> </ol>   |   |  |
|  |   |  |
| Attachment(s)  |   |  |
| 1. Notice of References Cited (PTO-892)  |   | formal Patent Application (PTO-152)  |
| 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)   | Paper No./  | ummary (PTO-413),<br>'Mail Date  |
| <ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/08<br/>Paper No./Mail Date</li> </ol>   | 8), 7. Examiner's   | Amendment/Comment  |
| 4. Examiner's Comment Regarding Requirement for Deposit  | 8. 🖄 Examiner's   | Statement of Reasons for Allowance   |
| of Biological Material   | 9. 🗌 Other  | <u>-</u>   |
|  |   |  |
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Application/Control Number: 10/625,135

Art Unit: 3617

## Reasons for Allowance

- An after-final amendment was received from the applicant on September 20,
   2004.
- 2. Claims 1-8 have been canceled.
- 3. Claims 9-15 are allowed.
- 4. The following is an examiner's statement of reasons for allowance. The watercraft as claimed is not shown or suggested in the prior art because of the use of a watercraft having a hull, a displacement body portion that extends between fore and aft ends of said hull, a first channel-defining structure portion of said hull that is located on the port side of said displacement body and includes a first wing structure, and a second channel-defining structure portion of said hull that is located on the starboard side of said displacement body and includes a second wing structure, where said first and second channels extend from said fore end to said aft end of said hull, and are adapted to capture a bow wave, causing air and water to mix and spiral toward said aft end of said hull as compressed aerated water in order to reduce friction drag, increase lateral stability and dampen transmission of bow wave energy at said aft end of said hull, and where said hull includes at least one planing surface, at least one vertical step in said planing surface, an onboard propulsion engine, and means for venting exhaust from said engine at said vertical step in said planing surface in order to introduce gas along said planing surface.

Application/Control Number: 10/625,135

Art Unit: 3617

5. The prior art as disclosed by Rizzo (US 4,393,802) shows the use of a watercraft that is comprised of a hull having at lease one planing surface, at least one vertical step that includes an upper portion and a lower portion, an onboard propulsion engine, and means for venting exhaust from said engine at said vertical step in said planing surface in order to introduce gas along said planing surface. Robinson et al. (US 6,250,245) discloses a watercraft having an M-shaped hull. Field (US 4,989,534) discloses a watercraft having multiple hulls with multiple planing surfaces and multiple vertical steps, where a means for venting gas is provided on each of said multiple vertical steps in order to introduce gas along each of said planing surfaces. Burg (US 4,587,918) discloses a watercraft having a planing surface with multiple vertical steps and gas supply ducts that face downwardly at each of said vertical steps from said planing surface. However, none of the prior art cited shows or suggests the use of a watercraft having a hull, a displacement body portion that extends between fore and aft ends of said hull, a first channel-defining structure portion of said hull that is located on the port side of said displacement body and includes a first wing structure, and a second channel-defining structure portion of said hull that is located on the starboard side of said displacement body and includes a second wing structure, where said first and second channels extend from said fore end to said aft end of said hull, and are adapted to capture a bow wave, causing air and water to mix and spiral toward said aft end of said hull as compressed aerated water in order to reduce friction drag, increase lateral stability and dampen transmission of bow wave energy at said aft end of said hull, and where said hull includes at least one planing surface, at least one vertical step in said

Application/Control Number: 10/625,135

Art Unit: 3617

planing surface, an onboard propulsion engine, and means for venting exhaust from said engine at said vertical step in said planing surface in order to introduce gas along said planing surface.

## Conclusion

- 6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 7. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

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October 5, 2004

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Page 4

10/5/04